

VILANDER et al
Serial No. 09/734,040

Atty Dkt: 2380-198
Art Unit: 2153

REMARKS/ARGUMENTS

Reexamination of the captioned application is respectfully requested.

A. NOT ALL CLAIMS WERE EXAMINED

Applicants contend that new claims 18 - 34 were submitted via a Preliminary Amendment filed February 20, 2001. The new claims 18 - 34 were submitted along with, e.g., Applicants' response to the Missing Parts Notice. Proof of filing of claims 18 - 34 is attached, including the filed Preliminary Amendment and receipt card evidencing same.

Conveniently, new claims 18 - 34 are method claims having essentially one-to-one correspondence with examined apparatus claims 1 - 17. For expediting prosecution, Applicants have presumed that the rejections applied against apparatus claims 1 - 17 would also be applied to corresponding ones of the method claims 18 - 34.

It is respectfully requested that the Preliminary Amendment be entered and thus claims 18 - 34 be considered in this application. If more convenient for the Examiner, this amendment may be viewed as adding new claims 18 - 34.

B. SUMMARY OF THIS AMENDMENT

By the current amendment, Applicants basically:

1. Amend independent claims 1 and 18 for more particularly describing the interfaces over which the inventive protocol stack is utilized.
2. Cancel claims 11 and 28 without prejudice or disclaimer.
3. Amend claims 9, 17, and 26 to moot the rejections under 35 USC §112, second paragraph.
4. Add new dependent claims 35 - 40 (see Remarks Section D *infra*).

VILANDER et al
Serial No. 09/734,040

Atty Dkt: 2380-198
Art Unit: 2153

5. Add new apparatus independent claim 41 and claims 42 - 46 dependent thereon, as well as new independent method claim 50 and claims 51 - 55 dependent thereon, specifically directed to Applicants' "first" implementation.
6. Add new apparatus independent claim 47 and claims 48 - 49, as well as new independent method claim 56 and claims 57 - 58 dependent thereon, dependent thereon, specifically directed to Applicants' "fourth" implementation.
7. Respectfully traverse all prior art rejections.

C. THE CLAIMS ARE DEFINITE

Applicants have amended claims 9, 17, and 26 to moot the rejections under 35 USC §112, second paragraph, by further describing in these claims Applicants' XTP protocol. As amended, claims 9, 17, and 26 incorporate certain features of Applicants' XTP protocol, as explained and supported, e.g., on page 15, line 18+ and page 16, lines 6 - 7, of Applicants' specification. As such, Applicants' XTP differs from and is not to be confused with the XTP protocol employed, e.g., in U.S. Patent 6,654,344 to Toporek et al. (see page 15, first full paragraph of Applicants' specification).

D. THE NEW CLAIMS

New dependent claims 35 - 40 concern reordering of the in-coming IP datagrams of the Internet Protocol, as necessary. These new claims are supported, e.g., by page 12, lines 25+ and page 17, lines 7+ of the original disclosure.

New independent claim 41 and claims 42 - 46 dependent thereon, specifically directed to Applicants' "first" implementation. New independent claim 41 resembles original independent claim 1 combined with original dependent claim 3, with an additional limitation that "UDP port numbers of the UDP Protocol are used as connection

VILANDER et al
Serial No. 09/734,040

Atty Dkt: 2380-198
Art Unit: 2153

identifiers". This additional limitation is supported, e.g., by page 5, lines 14 - 15 of the original disclosure. New dependent claims 42 - 46 correspond to original claims 2 - 6, respectively.

New independent claim 47 and claims 48 - 49 dependent thereon, specifically directed to Applicants' "fourth" implementation. New independent claim 47 resembles portions of original independent claim 1 combined with original dependent claim 14, and a portion of original dependent claim 15.

New independent claims 50 - 55 are method analogues to new claims 41 - 46; new independent claims 56 - 58 are method analogues to new claims 47 - 49.

E. PATENTABILITY OF THE CLAIMS

Claims 9, 11 and 17 stand rejected under 35 USC 112 (see enumerated paragraph 2 of the Office Action). Claims 1-12 and 17 stand rejected under 35 USC 102(e) as being anticipated by U.S. Patent 6,654,344 to Toporek et al (see enumerated paragraph 3 of the Office Action). Claims 13-16 stand rejected under 35 USC 103(a) as being unpatentable over U.S. Patent 6,654,344 to Toporek et al in view of Report No. 247 to Menth (see enumerated paragraph 4 of the Office Action). All prior art rejections are respectfully traversed for at least the following reasons.

As amended, both of Applicants' independent claim 1 and 18 require use of a replacement protocol stack over an interface which conventionally utilizes ATM and AAL2. The replacement protocol stack comprises, e.g., the layers which replace the ATM and AAL2, Internet Protocol over a link layer protocol. That Applicants' protocol stack is a replacement protocol stack over an interface which conventionally utilizes ATM and AAL2 is manifest throughout the specification, including (for example) page 12, lines 17 - 20; page 13, lines 4 - 7; and page 14, lines 30+.

VILANDER et al
Serial No. 09/734,040

Atty Dkt: 2380-198
Art Unit: 2153

It cannot be said that U.S. Patent 6,654,344 to Toporek et al teaches or suggests replacing ATM and AAL2 over an interface which conventionally employs ATM and AAL2 with Internet Protocol over a link layer protocol. The Office Action apparently concludes that a protocol stack of Toporek's satellite gateway 203 has an Internet Protocol (227) over a link layer protocol (alleged as driver 225). However, the interface(s) of U.S. Patent 6,654,344 to Toporek et al are not the type nor in the radio network context the interfaces specified by Applicants' claims.

The protocol of Toporek purportedly serves to improve performance of handling end-to-end TCP sessions over a path segment that is comprised of a satellite link with its characteristic long propagation delay. The problem address by Toporek is entirely different from Applicants' handling of protocols, such as the UMTS user plane frame protocol on top of UDP/IP (for example).

The interfaces over which Applicants operate conventionally employ ATM and AAL2 protocols, and as such typically provide in-sequence delivery. Applicants have configured replacement protocol stacks which can be utilized in lieu of ATM and AAL2 protocols. The replacement protocol stacks utilized Internet Protocol which, unlike ATM combined with ALL2, does not provide in-sequence delivery. However, aspects of Applicants' replacement protocol stacks -- either a modification of the Internet Protocol itself or a protocol above the Internet Protocol -- provide means for a receiver to re-order the incoming IP datagrams, and to detect missing IP datagrams.

There is nothing in U.S. Patent 6,654,344 to Toporek et al to teach or suggesting utilizing Internet Protocol over a link layer protocol in the manner of Applicants' independent claim 1 and 18. Accordingly, the prior art rejection should be withdrawn.

VILANDER et al
Serial No. 09/734,040

Atty Dkt: 2380-198
Art Unit: 2153

Moreover, while various other claim features are alleged as taught or suggested in the applied references including U.S. Patent 6,654,344 to Toporek et al, Applicants are unable to find any such teaching or suggestion. For example, Applicants are unable to ascertain how U.S. Patent 6,654,344 to Toporek et al allegedly teaches UDP protocol. If the Examiner persists in the pending prior art rejections and the UDP claims in particular, the Examiner is respectfully requested to explain the allegations at the top of page 5 of the office action, and how layer 227 (col. 10, lines 22 - 36) constitute UDP.

In view of the deficiencies of U.S. Patent 6,654,344 to Toporek et al, as outlined above, Applicants deem the pending prior art rejections inapplicable to the new claims specifically drawn to Applicants' first and fourth implementation.

F. MISCELLANEOUS

In view of the foregoing and other considerations, all claims are deemed in condition for allowance. A formal indication of allowability is earnestly solicited.

The Commissioner is authorized to charge the undersigned's deposit account #14-1140 in whatever amount is necessary for entry of these papers and the continued pendency of the captioned application.


Should the Examiner feel that an interview with the undersigned would facilitate allowance of this application, the Examiner is encouraged to contact the undersigned.

VILANDER et al
Serial No. 09/734,040

Atty Dkt: 2380-198
Art Unit: 2153

Respectfully submitted,

NIXON & VANDERHYE P.C.

By: 
H. Warren Burnam, Jr.
Reg. No. 29,366

HWB:1sh
1100 North Glebe Road, 8th Floor
Arlington, VA 22201-4714
Telephone: (703) 816-4000
Facsimile: (703) 816-4100

Attachment:
Preliminary Amendment filed February 20,
2001 and proof of filing